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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,479	05/24/2006	Yong-Geun Hong	CU-4833 WWP	4340

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EXAMINER

SARWAR, BABAR

ART UNIT	PAPER NUMBER
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2617

MAIL DATE	DELIVERY MODE
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10/30/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/580,479	Applicant(s) HONG ET AL.	
	Examiner BABAR SARWAR	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 2, 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Consider **claim 1**, it recites in line 4 “a mobile node is moved in a layer 2”. The mobile node relates to an apparatus (hardware) and the layer 2 relates to a logical layer (software). It is vague as to how an apparatus can move in the logical layer.

Appropriate correction is required.

Further, it recites in line 4 “receiving a modified RS message from a mobile node”. The abbreviation “RS” is not defined in the claim nor is it explained in the specification. Appropriate correction is required.

Further, it recites in lines 4, 5, and 6 “a mobile node is moved in a layer 2, receiving a modified RS message from a mobile node (MN) in the access router”. It is vague as to what is meant by “a mobile node” and “a mobile node (MN)”. It is unclear if they are same or different entities.

Appropriate correction is required.

Moreover, it recites in line 10 “the mobile node moves in the layer 3”. The mobile node relates to an apparatus (hardware) and the layer 3 relates to a logical layer (software). It is vague as to how an apparatus can move in the logical layer.

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Appropriate correction is required.

Consider **claim 2** recites the limitation " the access point" in lines 4, and 7. There is insufficient antecedent basis for this limitation in the claim.

Appropriate correction is required.

Consider **claim 5**, it recites in line 2 "the movement of the mobile node in the layer 3". The mobile node relates to an apparatus (hardware) and the layer 3 relates to a logical layer (software). It is vague as to how an apparatus can move in the logical layer.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gwon et al. (US 2003/0104814 A1) in view of Koodli et al. (US 6930988 B2), hereinafter referenced as Gwon and Koodli.

Consider **claim 1**, Gwon discloses a method for performing mobile IPv6 fast handover based on an access router (AR) (Abstract, Para 0009, 0013 and exhibited in fig. 1). Gwon further teaches that a) if a mobile node is moved in a layer 2, receiving a modified RS message from a mobile node (MN) in the access router, and b) detecting movement of the mobile node in a layer 3 in the access router based on the modified

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RS message transmitted from the mobile node in the access router (Abstract, Para 0005, 0009, 0012, 0014-0016, 0041-0042, 0049, 0051, and exhibited in figs. 1-4). Gwon discloses that c) if the mobile node moves in the layer 3, generating a new Care of Address (CoA) of the mobile node in the access router (Para 0005-0007, 0043). Gwon teaches that e) transmitting a modified Router Advertisement (RA) message, which corresponds to the modified RS message transmitted from the mobile node, to the mobile node in the access router (Para 0007, 0044-0045, 0052, 0058, 0070).

Gwon fails to specifically disclose that d) performing Duplicate Address Detection (DAD) in the access router to inspect uniqueness of the generated CoA. Koodli teaches that performing Duplicate Address Detection (DAD) in the access router to inspect uniqueness of the generated CoA (Abstract, Col. 1 lines 35-42, Col. 2 lines 11-40, Col. 4 lines 20-38, and exhibited in fig. 3).

Therefore it would have been obvious to one of ordinary skills in the art at the time the invention was made to modify Gwon by specifically providing the step of performing Duplicate Address Detection (DAD) in the access router to inspect uniqueness of the generated CoA, as taught by Koodli, for the purpose of avoiding the handover latencies as discussed in Col. 1 lines 11-48.

Consider **claim 2**, Gwon and Koodli disclose everything claimed as implemented above (see claim 1). In addition, Gwon teaches that receiving a reassociation request message from the mobile node in the access point, and transmitting a reassociation reply message corresponding to the reassociation request message to the mobile node

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in the-access-point (Abstract, Para 0007-0012, 0014, 0045, 0057,0076 and exhibited in figs. 3a-c, 4a-c, 7a-b, 8a-b).

Consider **claim 3**, Gwon and Koodli disclose everything claimed as implemented above (see claim 1). In addition, Gwon teaches that receiving the modified RA message transmitted from the access router, using the CoA specified in the modified RA message, which is transmitted from the access router, as a network interface address of the mobile node without DAD, and performing binding update in the mobile node (Para 0005-0007, 0043-0045, and exhibited in fig. 2).

Consider **claim 4**, Gwon and Koodli disclose everything claimed as implemented above (see claim 3). In addition, Gwon teaches that wherein, in step a) the access router receives the RS message from the mobile node as soon as the layer 2 handover is completed in the mobile node (0012, 0049, exhibited in figs. 2, 3a-c).

Consider **claim 5**, Gwon and Koodli disclose everything claimed as implemented above (see claim 4). In addition, Gwon teaches that wherein, in the step b) the movement of the mobile node in the layer 3 is detected by comparing a neighbor cache value of the access router and a layer 2 identifier of the mobile node included in the modified RS message, which is transmitted from the mobile node (Para 0016, 0052, 0059, figs. 2 and 3a-c).

Consider **claim 6**, Gwon and Koodli disclose everything claimed as implemented above (see claim 5). In addition, Gwon teaches that the modified RS message includes a flag which signifies the generation of CoA (CoA Generate) (Para 0005-0007, 0043, 0072-0073).

Consider **claim 7**, Gwon and Koodli disclose everything claimed as implemented above (see claim 6). In addition, Gwon teaches that the modified RA message includes a flag which signifies the generation of CoA (CoA Generate) (Para 0005-0007, 0043, 0072-0073).

Consider **claim 8**, Gwon and Koodli disclose everything claimed as implemented above (see claim 7). In addition, Gwon teaches that the modified RA message includes a CoA which is generated in the step c) (Para 0007, 0044-0045, 0052, 0058, 0070, 0072-0073).

Consider **claim 9**, Gwon and Koodli disclose everything claimed as implemented above (see claim 8). In addition, Gwon teaches the modified RA message includes a flag which signifies that the CoA is included in a prefix (Para 005, 0007, 0012, 0014, 0044-0045, 0052, 0058, 0070, 0072-0073).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BABAR SARWAR whose telephone number is (571)270-5584. The examiner can normally be reached on MONDAY TO FRIDAY 09:30 A.M -05:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, NICK CORSARO can be reached on (571)272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BABAR SARWAR/
Examiner, Art Unit 2617
October 24, 2008.

/NICK CORSARO/
Supervisory Patent Examiner, Art
Unit 2617